UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/162,768	09/30/1998	JOHN S. HENDRICKS	5315	9228

7590 07/31/2003

Aido Noto
Dorsey & Whitney LLP
1001 Pennsylvania Avenue N.W.
Suite 300 South
Washington, DC 20004

EXAMINER	
KOENIG, ANDREW Y	
ART UNIT	PAPER NUMBER
2611	15

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/162,768	HENDRICKS ET AL.	
	Examiner	Art Unit	
	Andrew Y Koenig	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 June 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-35,37-43,45,47-60,62,64-80,82-116,118 and 120-145* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-35,37-43,45,47-60,62,64-80,82-116,118 and 120-145* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 03 June 03 directed to claims 144 and 145 have been fully considered but they are not persuasive.

2. Regarding claim 144, the applicant argues that references fail to disclose or teach a hardware upgrade receiving subscriber selections from the set top terminal. The examiner disagrees; the combination of Graczyk and Dekker teach the deficiency in that Graczyk teaches the AM/FM tuner card receiving commands via the host interface (PCI bus) 300 such as channel selection (col. 19, ll. 54-60, Table 2). Table 2 shows the commands given by the processor to the AM/FM tuner card; clearly the system of Graczyk enables external control via the external processor and enables user selection of audio programs from the host device.

3. Further, the applicant argues that none of the references recite: "simultaneously transmitting video signals that are unrelated to the digital audio signals." The examiner disagrees; Graczyk teaches receiving AM/FM audio signal along with video signals, but is silent on audio signals unrelated to the video signals. Dekker teaches receiving digital audio signals unrelated to the video signals (Abstract). Accordingly, the combination of Graczyk and Dekker teaches, "simultaneously transmitting video signals that are unrelated to the digital audio signals" as claimed. Accordingly, the rejection for claim 144 is maintained.

4. Applicant's arguments with respect to claims 1,3-35,37-43,45,47-60,62,64-80,82-116,118 and 120-143 have been considered but are moot in view of the new ground(s)

of rejection. The examiner notes that Graczyk is being characterized differently in this rejection, specifically, Graczyk teaches the limitation of "a hardware upgrade operable connected." Further, the examiner notes that input from the subscriber is inputted from the computer of Graczyk and is sent to the AM/FM card. By the amendment of "a hardware upgrade operably connected" has introduced new grounds of rejection on later claims.

Priority

Claims 41 and 114 recite a "direct satellite broadcast system," but there is no support in the specification for this term. Whereas the specification supports a "backyard satellite system," this is not equivalent to a "direct satellite broadcast system" as claimed. Since claims 41 and 114 are original claims, they are entitled to the filing date of the instant application of 30 September 1998.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 16-19, 99, 100, 105, and 106 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to

make and/or use the invention. It is understood that the terminal and the upgrade card could be remotely connected but one of ordinary skill in the art would not be enabled to receive modulated signals over a 4-wire connector (as recited in claim 16), a multipin connector (claim 17), a DB9-DB25 (claim 18), SCSI connector (19), or use the modulated signals in conjunction with a daisy-chain configuration (claims 99 and 105) or a daisy-chain configuration with SCSI connections (claims 100 and 106).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 3-4, 8-11, 13-14, 16-19, 22-24, 27-28, 31-33, 37-39, 41-43, 45, 47, 51-56, 60, 62, 64, 68-71, 73-74, 78, 80, 82, 86-89, 91-92, 96, 98-108, 110-114, 116, 118, 120, 124-127, 129-130, 134, 137-138, and 141-142 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,192,999 to Graczyk et al. in view of U.S. Patent 5,483,277 to Granger and U.S. Patent 4,513,315 to Dekker et al.

Regarding claims 1, 23, 24, 37, 45, 62, 80, 110, and 118, Graczyk teaches a computer system capable of receiving television signals and audio signals (fig. 4). Graczyk discloses audio components to be used in conjunction with displaying television signals (Abstract). Graczyk also teaches audio circuits solely for receiving audio signals (see fig. 4). Graczyk teaches cards connected to a bus 300, which

perform the functionality of the audio and video selection (col. 19, ll. 54-60), which read on a hardware upgrade operably connected for a set top terminal. Dekker teaches a tuning unit (fig. 1) for receiving both television and separate digital audio channels (Abstract). Whereas Dekker does not explicitly describe an interface for selecting audio programs, clearly the system of Dekker must select audio channel in order to permit the subscriber to listen to one of the plurality of audio channels and to enable a tuner to select the appropriate channel. Dekker teaches audio processing circuitry, such as tuning unit 15, demodulator 16, echo canceller 17, pulse restorer 18, stereo demodulator 19, and digital to analog converters (19 and 20). Furthermore, Dekker teaches left and right speakers for outputting the selected audio signal (see fig 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk to support receiving audio signal within the television bandwidth as taught by Dekker in order to provide more variety and selection for the subscribers thereby offering more services and enabling one system to utilize duplicative components in order to reduce the overall cost.

Graczyk is silent on using the audio circuits solely for receiving audio signals. Dekker teaches a tuning unit 15 (see figure 1), which reads on the claimed tuner. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by using a tuner in order to demodulate signals, thereby enabling the system to reproduce the audio signals.

Graczyk teaches the upgrade card but is silent on teaching a set top terminal. Granger teaches a switching module (fig. 6, label 300) connected to a set top converter

(fig. 6, 7, col. 7, ll. 28-41), which equates to a hardware upgrade operably connected to a set top terminal. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by connecting the upgrade card into the terminal as taught by Granger in order to reduce the overall cost of the set top terminal (Granger: col. 4, ll. 43-48). Further, Granger teaches that the user inputs selections into the converter, which is passed to the switching module (fig. 7, labels 326, 328, col. 7, ll. 48-51) in order to tune the appropriate channel.

Further regarding claims 110 and 118, Graczyk is silent on teaches HDTV signals. Official Notice is taken that HDTV signals are notoriously well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by using HDTV signals in order to benefit from the higher quality signals and pictures.

Regarding claims 3, 47, 64, 82, and 120, Graczyk is silent on using the audio circuits solely for receiving audio signals. Dekker shows a demodulator 16 (fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk to use an audio demodulator as taught by Dekker in order to demodulate the signal into base band, thereby allowing the audio system to reproduce the audio signal.

Regarding claim 4, Graczyk teaches digital audio signals (col. 6, ll. 18-32).

Regarding claims 8, 51, 68, 86, and 124, Graczyk shows 2 speakers in figure 4, labels 280, 284.

Regarding claims 9, 52, 69, 87, and 125, Graczyk teaches a serial line out which can be used for an external stereo connection (col. 37, ll. 60-63), such as an external power amplifier (col. 31, ll. 46-48, which reads on a stereo.

Regarding claims 10, 53, 70, 88, and 126, Graczyk teaches an 8742 processor (fig. 4, label 262) microprocessor accepting subscriber selections and controlling the audio circuitry.

Regarding claims 11, 25, 54, 71, 89, and 127, Graczyk teaches a remote control for entering subscriber selections (fig. 1, label 52).

Regarding claims 13, 27, 55, 73, 91, 129, 137, and 141, Graczyk is silent on displaying a channel identifier on the screen of the remote control unit. Official Notice is taken that displaying a channel identifier on the screen is well known in art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by displaying the channel identifier in order to notify the user which channel was last selected on the remote control and to give an active feedback to the user when a key is depressed.

Regarding claims 14, 28, 56, 74, 92, 130, 138, and 142, Dekker is silent on a display comprising an LED device. Official Notice is taken that using LED devices is well known in art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by displaying with an LED device in order to notify the user which channel was last selected on the remote control and to give an active feedback to the user when a key is depressed and provide an easy to use interface.

Regarding claims 16-18, Graczyk is silent on a terminal interface comprising a four-wire connector and DB9-DB25. Official Notice is taken that four-wire multipin connectors and connectors from DB9-DB25 are notoriously well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by supporting a variety of interface connectors in order to enable a plurality of interfaces to access the module thereby enabling easier inputting/outputting of data.

Regarding claim 19, Graczyk teaches SCSI (fig. 1, lab. 13).

Regarding claims 22, 60, 78, 96, and 134, Graczyk teaches outputting both left and right components of a stereo signal (figure 4, labels 280, 284).

Regarding claims 31, 98, and 104, Graczyk teaches an expansion card slot, see fig. 45.

Regarding claim 32, Graczyk is silent on a display indicating using the first hardware upgrade. Official Notice is taken that a display indicating use is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by indicating use on a display in order to inform the user of pertinent information and present an active feed-back to the user to notify them that the device is currently being used.

Regarding claims 33, 102, and 108, Graczyk is silent on a hardware upgrade remotely located from the terminal. Dekker teaches a stand-alone audio receiving unit (fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by moving the audio components as a

stand alone unit as taught by Dekker in order to allow the user to simplify the upgrade process, thereby enabling a more user-friendly system.

Regarding claims 38, and 111, Graczyk teaches receiving the signals that are transmitted via broadcast or cable (col. 5, ll. 62-68), a program delivery system must send those signals.

Regarding claims 39, 40, 41, 112, 113, and 114, Graczyk is silent on teaches an operation center, one or more headends, and satellite system. Official Notice is taken that an operation center, one or more headends, and satellite systems are notoriously well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by using an operation center, one or more headends, or a satellite system in order to transmit signals to the users.

Regarding claims 43 and 116, Graczyk teaches a telephone connection to the terminal (fig. 1, lab. 22).

Regarding claims 99, 100, 105, and 106, Graczyk teaches SCSI (fig. 1, lab. 13) and SCSI inherently has a connector supports the daisy-chain arrangement

Regarding claims 101 and 107, Graczyk teaches simultaneous operation (col. 5, ll. 3-14).

Regarding claim 103, Graczyk teaches a multimedia circuit (claimed one additional hardware upgrade) (fig. 1, label 14), which produces audio output and clearly must receive user input, such as playing CD-ROM (fig. 1, label 28, col. 36, ll. 2-10).

9. Claims 5, 6, 48, 49, 65, 66, 83, 84, 121, and 122 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,192,999 to Graczyk et al., U.S. Patent 5,483,277 to Granger, and U.S. Patent 4,513,315 to Dekker et al. in view of U.S. Patent 5,270,809 to Gammie et al.

Regarding claims 5, 48, 65, 83, and 121, Graczyk is silent on demultiplexing the digital audio signals. Gammie teaches an audio demultiplexer fig. 4, label 417. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by using an audio demultiplexor as taught by Gammie in order to remove the unnecessary content from the signal in order to accurately process and reproduce the audio signal.

Regarding claims 6, 49, 66, 84, and 122, Graczyk is silent on a decryptor for the digital audio signals. Gammie teaches an audio decryption unit, fig. 4, label 417. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by using an audio decryptor as taught by Gammie in order to remove the unnecessary content and protection from the signal thereby accurately processing and reproducing the audio signal.

10. Claims 7, 50, 67, 85, and 123 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,192,999 to Graczyk et al., U.S. Patent 5,483,277 to Granger, and U.S. Patent 4,513,315 to Dekker et al. in view of U.S. Patent 5,550,863 to Yurt et al.

Regarding claims 7, 50, 67, 85, and 123, Graczyk is silent on a decompressor for the compressed audio signals. Yurt teaches an audio decompressor, fig. 6, label 208, which inherently decompresses the audio signal in order to produce a more accurate representation of the audio segment lost during transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by using a decompressor as taught by Yurt in order to provide a more accurate reproduction of the audio signal.

11. Claims 12, 15, 26, 27, 29, 57, 72, 75, 90, 93, 128, 131, 136, 139, 140, and 143 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,192,999 to Graczyk et al., U.S. Patent 5,483,277 to Granger, and U.S. Patent 4,513,315 to Dekker et al. in view of U.S. Patent 5,410,326 to Goldstein.

Regarding claims 12, 15, 23, 26, 27, 29, 57, 72, 75, 90, 93, 128, 131, 136, 139, 140, and 143, Graczyk is silent on the remote control comprising a display. Goldstein teaches a remote control with a LCD display (col. 8, ll. 7-14). Therefore, it would have been obvious to one of ordinary skill in art at the time the invention was made to modify Graczyk by implementing a LCD display on the remote control as taught by Goldstein in order to present information to the via the remote control thereby enabling the user to receive advertisements and providing an easy to use interface.

12. Claims 20, 21, 30, 34, 42, 58, 76, 94, 115, and 132 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,192,999 to Graczyk et al., U.S. Patent

5,483,277 to Granger, and U.S. Patent 4,513,315 to Dekker et al. in view of U.S. Patent 5,253,066 to Vogel.

Regarding claims 20, 30, 58, 76, 94, and 132, Graczyk is silent on a menu generator. Vogel teaches the use of menus, see figures 3-4. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by using a menu generator as taught by Vogel in order to create menus thereby making a user-friendly user interface to present to the user.

Regarding claims 21 and 34, Graczyk is silent on a channel identifier display. Vogel teaches displaying a channel identifier corresponding to the user selection (fig. 4).

Regarding claims 42 and 115, Graczyk is silent on teaching using fiber optic connections. Vogel teaches fiber optic connections (col. 8, ll. 36-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by using fiber optic connections as taught by Vogel in order to benefit from the high bandwidth and signal characteristics of fiber optic cables.

13. Claims 79, 97, 103, 109, and 135 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,192,999 to Graczyk et al., U.S. Patent 5,483,277 to Granger, and U.S. Patent 4,513,315 to Dekker et al. in view of U.S. Patent 5,327,554 to Palazzi et al.

Regarding claims 103 and 109, Graczyk is silent on receiving interactive input and producing interactive output. Palazzi teaches communicating with interactive services (online databases) outside the television network (col. 5, ll. 63-66) and

supplying financial information (col. 9-10, ll. 61-10), which requires interactive subscriber input. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by using interactive inputs and outputs as taught by Palazzi in order to efficiently display pertinent information to the user.

14. Claims 35, 59, 77, 95, and 133 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,192,999 to Graczyk et al., U.S. Patent 5,483,277 to Granger, and U.S. Patent 4,513,315 to Dekker et al. in view of U.S. Patent 4,887,308 to Dutton.

Regarding claims 35, 59, 77, 95, and 133, Graczyk is silent on receiving one of more data signals containing information about the audio programs. Dutton teaches receiving a separate data channel containing information about audio programs (Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by receiving supplemental information about audio programs in order to provide the user with more information, such as the artist, title, etc. in order to promote usability.

15. Claims 144-145 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,192,999 to Graczyk et al. and U.S. Patent 4,513,315 to Dekker et al. in view of U.S. Patent 5,479,268 to Young et al.

Regarding claim 144, Graczyk teaches a computer system capable of receiving television signals and audio signals (fig. 4). Graczyk discloses audio components to be used in conjunction with displaying television signals (Abstract). Graczyk also teaches audio circuits solely for receiving audio signals (see fig. 4). Dekker teaches a tuning unit (fig. 1) for receiving both television and separate digital audio channels (Abstract). Whereas Dekker does not explicitly describe an interface for selecting audio programs, clearly the system of Dekker must select audio channel in order to permit the subscriber to listen to one of the plurality of audio channels and to enable a tuner to select the appropriate channel. Dekker teaches audio processing circuitry, such as tuning unit 15, demodulator 16, echo canceller 17, pulse restorer 18, stereo demodulator 19, and digital to analog converters (19 and 20). Furthermore, Dekker teaches left and right speakers for outputting the selected audio signal (see fig 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk to support receiving audio signal within the television bandwidth as taught by Dekker in order to provide more variety and selection for the subscribers thereby offering more services and enabling one system to utilize duplicative components in order to reduce the overall cost.

Graczyk is silent on using the audio circuits solely for receiving audio signals. Dekker teaches a tuning unit 15 (see figure 1), which reads on the claimed tuner. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk by using a tuner in order to demodulate signals, thereby enabling the system to reproduce the audio signals.

Graczyk is silent on a hardware upgrade for the set top terminal remotely located from the set top terminal. Young teaches a schedule system/tape controller (fig. 22A 22B) (claimed hardware upgrade), which is located remotely from the set top terminal (col. 12, ll. 38-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graczyk remotely locating devices (e.g. upgrades) by Young in order to diversify a system by enabling one to customize their setup by adding and removing devices.

Regarding claim 145, Graczyk teaches a remote control for entering subscriber selections (fig. 1, label 52).

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y Koenig whose telephone number is (703) 306-0399. The examiner can normally be reached on M-Th (7:30 - 6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

ayk
July 24, 2003